

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

April 26, 2004.

TO: Internal File

THRU: Daron Haddock, Permit Supervisor *DH*

FROM: Steve Fluke, Reclamation Hydrogeologist *SVF*

RE: 2000, Second Quarter Water Monitoring, Genwal Resources, Inc.,
Crandall Canyon Mine, C/015/0032-WQ00-2, Task ID #1155

1. Was data submitted for all of the MRP required sites? YES ☒ NO ☐

2. On what date does the MRP require a five-year resampling of baseline water data.

Resampling due date.

Sampling and analyses for baseline parameters (Tables 7-5 and 7-9 in the MRP) are to be performed during low-flow (fourth quarter) in 1990, 1995, 2000, and at five-year intervals thereafter until the surety bond is released. According to the data submitted to the DOGM database, a partial sampling and analyses of baseline parameters was last conducted during the second quarter of 1996.

3. Were all required parameters reported for each site? YES ☐ NO ☒

Well MW-6A: no depth or water level reported. The well has not been accessible since 2001.

4. Were irregularities found in the data? YES ☒ NO ☐

Spring SP-58: reported dissolved sodium concentration of 2 mg/L is below the two standard deviation range. This concentration appears to be an anomaly based on the reported analyses through 2003.

Spring SP1-33: reported total iron concentration of 1.8 milligrams per liter (mg/L) which is above the Utah Division of Water Quality (DWQ) Class 3A Cold Water Aquatic Wildlife limit of 1.0 mg/L. This concentration appears to be an anomaly based on the reported analyses through 2003.

Spring SP1-47: reported a high temperature of 25.3 °C. June temperature measurements are historically higher based on measurements reported through 2003.

Spring SP2-24: reported total dissolved solids (TDS) concentration of 304 mg/L is above the two standard deviation range. This concentration appears to be an anomaly based on the reported analyses through 2003.

Well MW-6: no water level reported, but the depth is reported at 0 feet. Also, pH is reported at 12.2, which is the median pH for this well. The well has not been accessible since 2001.

Blind Canyon Flume: reported dissolved sodium concentration of 2 mg/L is below the two standard deviation range. This concentration appears to be an anomaly based on the reported analysis through 2003.

5. Were DMR forms submitted for all required sites?

1st month, YES [] NO [X]
2nd month, YES [] NO [X]
3rd month, YES [] NO [X]

DMR data is submitted to the DOGM database. No data was submitted for UPDES site 001. Data for UPDES site 002 was submitted for all three months.

6. Were all required DMR parameters reported? YES [] NO [X]

UPDES site 002: missing dissolved oxygen (D.O.) data for April and total iron data for May.

7. Were irregularities found in the DMR data? YES [] NO [X]

8. Based on your review, what further actions, if any, do you recommend?

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Well MW-6A: have depth or water level input to database if available.

Well MW-6: determine why water levels are reported as 0 feet even though samples have apparently been collected.

UPDES site 001: have DMR data for this site input to database if available. With the exception of March 2000, this site has no reported discharge through 2003. However, the database is missing data for the second, third, and fourth quarters for 2000.

UPDES site 002: have missing D.O. and total iron data input to database if available. With the exception of omissions of total iron data for April and May 2001, reported concentrations of these parameters have not been out of compliance through 2003.

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